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In re application of:

Oko and Sutovsky

Appl. No. 09/864,291

Filed: May 25, 2001

For: **PT32 SPERM PROTEIN,  
SPERM C-YES, OOCYTE  
CYTOPLASMIC C-YES, AND  
USES THEREOF**

Art Unit: 1646

Examiner: *To be assigned*

Atty. Docket: 1669.0050001/EEF/RGM

### Information Disclosure Statement

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

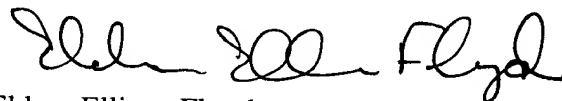
This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

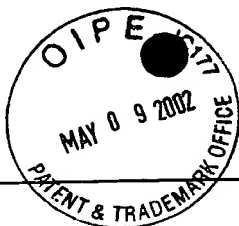
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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Registration No. 39,967

Date: May 9, 2002

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FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1669.0050001/EEF/RGM	APPLICATION NO. 09/864,291
	MAY 10 2002	
	FILING DATE May 25, 2001	GROUP 1646

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA1	5,672,488	09/30/1997	Dean	435	69.3	05/30/1995
	AB1	5,753,231	05/19/1998	Herr et al.	424	185.1	10/30/1995
	AC1	5,770,363	06/23/1998	Brown	435	6	06/07/1995
	AD1	5,843,754	12/01/1998	Susko-Parrish et al.	435	450	06/06/1995
	AE1	5,897,988	04/27/1999	Huszar	435	2	01/21/1998
	AF1	5,916,768	06/29/1999	Dean	435	69.3	05/23/1997
	AG1	5,945,577	08/31/1999	Stice et al.	800	24	01/10/1997
	AH1	5,952,222	09/14/1999	Rosenkrans, Jr. et al.	435	325	08/02/1997
	AI1	5,989,549	11/23/1999	Sullivan et al.	424	184.1	06/08/1998
	AJ1	5,989,550	11/23/1999	Harris et al.	424	185.1	06/07/1995
	AK1	5,994,619	11/30/1999	Stice et al.	800	21	12/16/1996

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL1	WO 97/40386	10/30/1997	WIPO			Yes No
	AM1	WO 00/40700	07/13/2000	WIPO			Yes No
	AN1	WO 01/70261	09/27/2001	WIPO			Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	1	Abassi, Y.A., et al., "Evidence that Src-type tyrosine kinase activity is necessary for initiation of calcium release at fertilization in sea urchin eggs," <i>Dev. Biol.</i> 218:206-210, Plenum Press (February 2000).
AS	1	Battaglia, D.E., et al., "Failure of oocyte activation after intracytoplasmic sperm injection using round-headed sperm," <i>Fertil. Steril.</i> 68:118-122, Elsevier Science (1997).
AT	1	Bellvé, A.R., et al., "The perinuclear matrix as a structural element of the mouse sperm nucleus," <i>Biol. Reprod.</i> 47:451-465, Society for the Study of Reproduction (1992).

EXAMINER	DATE CONSIDERED
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



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1669.0050001/EEF/RGMAPPLICATION NO.  
09/864,291APPLICANT  
Oko and Sutovsky

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FILING DATE  
May 25, 2001GROUP  
1646

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA2	6,011,197	01/04/2000	Strelchenko et al.	800	24	01/28/1999
	AB2	6,013,770	01/11/2000	Reeves et al.	530	367	07/21/1997
	AC2	6,013,857	01/11/2000	Deboer et al.	800	15	06/05/1995
	AD2	6,034,212	03/07/2000	Sudol et al.	530	324	06/07/1995
	AE2	6,045,799	04/04/2000	Reeves et al.	424	192.1	05/04/1998
	AF2	6,211,429	04/03/2001	Machaty et al.	800	24	06/18/1998
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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	2	Carroll, D.J., et al., "Identification of PLC $\gamma$ -dependent and independent events during fertilization of sea urchin eggs," <i>Dev. Biol.</i> 206:232-247, Plenum Press (1999).
	AS	2	Chen, H.I., et al., "The WW domain of Yes-associated protein binds a proline-rich ligand that differs from the consensus established for Src homology 3-binding modules," <i>Proc. Natl. Acad. Sci. USA</i> 92:7819-7823, National Academy of Sciences (1995).
	AT	2	Chen, H.I., et al., "Characterization of the WW domain of human Yes-associated protein and its polyproline-containing ligands," <i>J. Biol. Chem.</i> 272:17070-17077, American Society for Biochemistry and Molecular Biology, Inc. (1997).

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	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>3</u>	Courtens, J.L., et al., "The perinuclear substance of boar, bull ram and rabbit spermatozoa," <i>J. Ultrastruct. Res.</i> 57:54-64, Academic Press, Inc. (1976).
	AS	<u>3</u>	Edirisinghe, W.R., et al., "Cytogenetic analysis of unfertilized oocytes following intracytoplasmic sperm injection using spermatozoa from a globozoospermic man," <i>Hum. Reprod.</i> 13:3094-3098, Oxford University Press (1998).
	AT	<u>3</u>	Einbond, A., et al., "Towards prediction of cognate complexes between the WW domain and proline-rich ligand," <i>FEBS Lett.</i> 384:1-8, Elsevier Science B.V. (1996).

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FORM 201-101  
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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>4</u>	Escalier, D., "Failure of differentiation of the nuclear-perinuclear skeletal complex in the round-headed human spermatozoa," <i>Int. J. Dev. Biol.</i> 34:287-297, UBC Press (1990).
	AS	<u>4</u>	Giusti, A.F., et al., "Evidence that a starfish egg Src family tyrosine kinase associates with PLC-γ1 SH2 domains at fertilization," <i>Dev. Biol.</i> 208:189-199, Plenum Press (April 1999).
	AT	<u>4</u>	Giusti, A.F., et al., "Evidence that fertilization activates starfish eggs by sequential activation of a Src-like kinase and phospholipase C gamma," <i>J. Biol. Chem.</i> 275:16788-16794, American Society for Biochemistry and Molecular Biology, Inc. (June 2000).

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APPLICANT  
Oko and Sutovsky

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May 25, 2001

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**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
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	AM						Yes No
	AN						Yes No
	AO						Yes No
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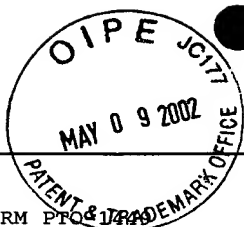
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	5	Gordo, A.C., et al., "Injection of sperm cytosolic factor into mouse metaphase II oocytes induces different developmental fates," <i>Biol. Reprod.</i> 62:1370-1379, Society for the Study of Reproduction (May 2000).
	AS	5	Hess, H., et al., "The protein complexity of the cytoskeleton of bovine and human sperm heads: the identification and characterization of cyclin II," <i>Exp. Cell Res.</i> 218:174-182, Academic Press, Inc. (1995).
	AT	5	Hess, H., et al., "Molecular characterization of mammalian cyclin, a basic protein of the sperm head cytoskeleton," <i>J. Cell Biol.</i> 122:1043-1052, Rockefeller University Press (1993).

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FORM PTO 1740

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## U.S. PATENT DOCUMENTS

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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

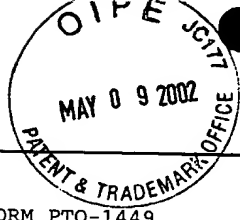
	AR	<u>6</u>	Hewitson, L.C., et al., "Microtubule and chromatin configurations during rhesus intracytoplasmic sperm injection: successes and failures," <i>Biol. Reprod.</i> 55:271-280, Society for the Study of Reproduction (1996).
	AS	<u>6</u>	Hewitson, L., et al., "Unique checkpoints during the first cell cycle of fertilization after intracytoplasmic sperm injection in rhesus monkeys," <i>Nat. Med.</i> 5:431-433, Nature Publishing Company (April 1999).
	AT	<u>6</u>	Hurst, S., et al., "Expression of testis-specific putative actin-capping protein associated with the developing acrosome during rat spermiogenesis," <i>Mol. Reprod. Dev.</i> 49:81-91, Wiley-Liss, Inc. (1998).

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	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

AR	7	Kay, B.K., et al., "The importance of being proline: the interaction of proline-rich motifs in signaling proteins with their cognate domains," <i>FASEB J.</i> 14:231-241, Federation of American Societies for Experimental Biology (February 2000).
AS	7	Kimura, Y., et al., "Analysis of mouse oocyte activation suggests the involvement of sperm perinuclear material," <i>Biol. Reprod.</i> 58:1407-1415, Society for the Study of Reproduction (1998).
AT	7	Korley, R., et al., "Analysis of protein composition of the mouse sperm perinuclear theca and characterization of its major protein constituent," <i>Biol. Reprod.</i> 57:1426-1432, Society for the Study of Reproduction (1997).

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	AL						Yes No
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	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	8	Leclerc, P., et al., "Distribution and localization of calmodulin-binding proteins in bull spermatozoa," <i>Biol. Reprod.</i> 62:1875-1881, Society for the Study of Reproduction (June 2000).
	AS	8	Lee, S.C., et al., "Sperm factor initiates capacitance and conductance changes in mouse eggs that are more similar to fertilization than IP <sub>3</sub> - or Ca <sup>2+</sup> - induced changes," <i>Dev. Biol.</i> 232:127-148, Plenum Press (April 2001).
	AT	8	Longo, F.J., et al., "Basic proteins of the perinuclear theca of mammalian spermatozoa and spermatids: A novel class of cytoskeletal elements," <i>J. Cell Biol.</i> 105:1105-1120, Rockefeller University Press (1987).

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	AN						Yes No
	AO						Yes No
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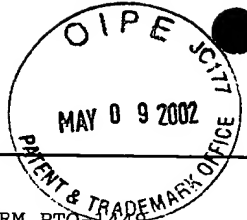
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	2	Machaty, Z., et al., "Porcine oocyte activation induced by a cytosolic sperm factor," <i>Mol. Reprod. Dev.</i> 57:290-295, Wiley-Liss, Inc. (November 2000).
	AS	2	Mehlmann, L., et al., "SH2 domain-mediated activation of phospholipase C is not required to initiate $Ca^{2+}$ release at fertilization in mouse eggs," <i>Dev. Biol.</i> 203:221-232, Plenum Press (1998).
	AT	2	Okitsu, O., et al., "Activation of bovine oocyte matured in vitro by injection of bovine and human spermatozoa or their cytosolic fractions," <i>Zygote</i> 9:89-95, Cambridge University Press (February 2001).

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1669.002-111-1000APPLICATION NO.  
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## U.S. PATENT DOCUMENTS

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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>10</u>	Okó, R. and Clermont, Y., "Isolation, structure and protein composition of the perforatorium of rat spermatozoa," <i>Biol. Reprod.</i> 39:673-687, Society for the Study of Reproduction (1988).
	AS	<u>10</u>	Okó, R., et al., "Regional differences in composition of the perforatorium and outer periacrosomal layer of the rat spermatozoa as revealed by immunocytochemistry," <i>Am. J. Anat.</i> 188:64-73, Wiley-Liss, Inc. (1990).
	AT	<u>10</u>	Okó, R. and Clermont, Y., "Origin and distribution of perforatorial proteins during spermatogenesis of the rat: an immunocytochemical study," <i>Anat. Rec.</i> 230: 489-501, Wiley-Liss, Inc. (1991).

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FORM PTO-145

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>11</u>	Okó, R. and Maravei, D., "Protein composition of the perinuclear theca of bull spermatozoa," <i>Biol. Reprod.</i> 50:1000-1014, Society for the Study of Reproduction (1994).
	AS	<u>11</u>	Okó, R., et al., "A novel testicular protein, with sequence similarities to a family of lipid binding proteins, is a major component of the rat sperm perinuclear theca," <i>Dev. Biol.</i> 166:235-245, Plenum Press (1994).
	AT	<u>11</u>	Okó, R., et al., "Developmental expression and possible role of perinuclear theca proteins in mammalian spermatozoa," <i>Reprod. Fertil. Dev.</i> 7:777-797, CSIRO (1995).

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	AO						Yes No
	AP						Yes No

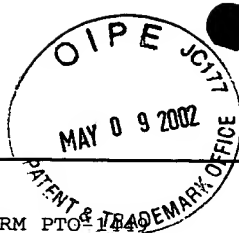
**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>12</u>	Oko, R., et al., "Distribution and possible role of perinuclear theca proteins during bovine spermiogenesis," <i>Microsc. Res. Tech.</i> 32:520-532, Wiley-Liss, Inc. (1995).
	AS	<u>12</u>	Oko, R., et al., "Germ cell-specific DNA and RNA binding proteins p48/52 are expressed at specific stages of male germ cell development and are present in the chromatoid body," <i>Mol. Reprod. Dev.</i> 44:1-13, Wiley-Liss, Inc. (1996).
	AT	<u>12</u>	Oko, R., "Occurrence and formation of cytoskeletal proteins in mammalian spermatozoa," <i>Andrologia</i> 30:193-206, Blackwell Wissenschafts Verlag GmbH (1998).

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FORM PTO-1549

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1669.0050001/EEF/RGMAPPLICATION NO.  
09/864,291APPLICANT  
Oko and SutovskyFILING DATE  
May 25, 2001GROUP  
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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>13</u>	Oko, R. and Clermont, Y., "Spermiogenesis," in: <i>Encyclopedia of Reproduction</i> Volume 4, Knobil, E. and Neill, J.D., eds., Academic Press, Inc., San Diego, California, pp. 602-609 (1998).
	AS	<u>13</u>	Oko, R., et al., "The sperm head cytoskeleton," in: <i>Proceedings of the VIIth International Congress of Andrology</i> , Robaire, B., et al., eds., Medimond Publishing Company, Englewood, New Jersey, pp. 37-51 (June 2001).
	AT	<u>13</u>	Parrington, J., "Does a soluble sperm factor trigger calcium release in the egg at fertilization?" <i>J. Andrology</i> 22:1-11, Allen Press (January 2001).

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FORM PTO-1255

## INFORMATION DISCLOSURE STATEMENT

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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>14</u>	Parrington, J., et al., "The soluble mammalian sperm factor protein that triggers Ca <sup>2+</sup> oscillations in eggs: evidence for expressison of mRNA(s) coding for sperm factor protein(s) in spermatogenic cells," <i>Biol. Cell.</i> 92:267-275, Elsevier Science (July 2000).
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	AT	<u>14</u>	Perry, A.C.F., et al., "A novel trans-complementation assay suggests full mammalian oocyte activation is coordinately initiated by multiple submembrane sperm compartments," <i>Biol. Reprod.</i> 60:747-755, Society for the Study of Reproduction (March 1999).

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INFORMATION DISCLOSURE STATEMENT

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	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>15</u>	Perry, A.C., et al., "Mammalian oocyte activation by the synergistic action of discrete sperm head components: induction of calcium transients and involvement of proteolysis," <i>Dev. Biol.</i> 217:386-393, Academic Press, Inc. (January 2000).
	AS	<u>15</u>	Pouresmaeili, F., et al., "Molecular cloning and structural analysis of the gene encoding PERF 15 protein present in the perinuclear theca of the rat spermatozoa," <i>Biol. Reprod.</i> 57:655-659, Society for the Study of Reproduction (1997).
	AT	<u>15</u>	Prochazka, R. and Fiser, P.S., "Behaviour of blastomere nuclei fused to mouse oocytes is affected by oocyte enucleation and age," <i>Reprod. Nutr. Dev.</i> 35:695-701, EDP Sciences (1995).

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## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>16</u>	Runft, L.L., et al., "Sperm extract injection into ascidian eggs signals Ca <sup>2+</sup> release by the same pathway as fertilization," <i>Development</i> 127:3227-3236, Company of Biologists Ltd. (August 2000).
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	AT	<u>16</u>	Rybouchkin, A., et al., " Analysis of the oocyte activating capacity and chromosomal complement of round-headed human spermatozoa by their injection into mouse oocyte," <i>Hum. Reprod.</i> 11:2170-2175, Oxford University Press (1996).

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## INFORMATION DISCLOSURE STATEMENT

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	AR	<u>17</u>	Rybouchkin, A.W., et al., "Fertilization and pregnancy after assisted oocyte activation and intracytoplasmic sperm injection in a case of round-headed sperm associated with deficient oocyte activation capacity," <i>Fertil. Steril.</i> 68:1144-1147, American Society for Reproductive Medicine (1997).
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	AR	<u>18</u>	Schultz, R.M. and Kopf, G.S., "Molecular basis of mammalian egg activation," <i>Curr. Topics Dev. Biol.</i> 30:21-62, Academic Press, Inc. (1995).
	AS	<u>18</u>	Sette, C., et al., "Involvement of phospholipase C $\gamma$ 1 in mouse egg activation of mouse eggs by microinjection of a truncated c-kit tyrosine kinase present in spermatozoa," <i>J. Cell Biol.</i> 124:1063-1074, Rockefeller University Press (1998).
	AT	<u>18</u>	Shearer, J., et al., "Role of phospholipase C gamma at fertilization and during mitosis in sea urchin eggs and embryos," <i>Development</i> 126:2273-2284, Company of Biologists Ltd. (May 1999).

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Oko and Sutovsky

FILING DATE  
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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

AR	19	Sofikitis, N., et al., "The early haploid gamete develops a capacity for fertilization after the coalescence of the proacrosomal granules," <i>Hum. Reprod.</i> 12:2713-2719, Oxford University Press (1997).
AS	19	Sudol, M., "Yes-associated protein (YAP65) is a proline-rich phosphoprotein that binds to the SH3 domain of the Yes proto-oncogene product," <i>Oncogene</i> 9:2145-2152, Stockton Press (1994).
AT	19	Sudol, M., et al., "Characterization of a novel protein-binding module - the WW domain," <i>FEBS Lett.</i> 369:67-71, Elsevier Science B.V. (1995).

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FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1669.0050001/EEF/RGM	APPLICATION NO. 09/864,291
	APPLICANT Oko and Sutovsky	
	FILING DATE May 25, 2001	GROUP 1646

## U.S. PATENT DOCUMENTS

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	AL						Yes No
	AM						Yes No
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	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	<u>20</u>	Sudol, M., "From Src homology domains to other signaling modules: proposal of the protein recognition code," <i>Oncogene</i> 17:1469-1474, Stockton Press (1998).
AS	<u>20</u>	Sudol, M., et al., "New wrinkles for an old domain," <i>Cell</i> 103:1001-1004, Cell Press (December 2000).
AT	<u>20</u>	Sutovsky, P., et al., "Intracytoplasmic sperm injection for Rhesus monkey fertilization results in unusual chromatin, cytoskeletal, and membrane events, but eventually leads to pronuclear development and sperm aster assembly," <i>Hum. Reprod.</i> 11:1703-1712, Oxford University Press (1996).

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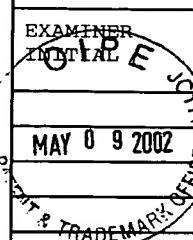
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FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

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1669.0050001/EEF/RGMAPPLICATION NO.  
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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	<u>21</u>	Sutovsky, P., et al., "Fate of the sperm mitochondria, and the incorporation, conversion, and disassembly of the sperm tail structures during bovine fertilization," <i>Biol. Reprod.</i> 55:1195-1205, Society for the Study of Reproduction (1996).
AS	<u>21</u>	Sutovsky, P., et al., "The removal of the sperm perinuclear theca and its association with the bovine oocyte surface during fertilization," <i>Dev. Biol.</i> 188:75-84, Plenum Press (1997).
AT	<u>21</u>	Sutovsky, P., et al., "On-stage selection of single round spermatids using a vital, mitochondrion-specific fluorescent probe MitoTracker™ and high resolution differential interference contrast microscopy," <i>Hum. Reprod.</i> 14:2301-2312, Oxford University Press (September 1999).

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FORM PTO-1449

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	AN						Yes No
	AO						Yes No
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AR	22	Sutovsky, P. and Schatten, G., "Paternal contributions to the mammalian zygote: fertilization after sperm-egg fusion," <i>Int. Rev. Cytol.</i> 195:1-65, Academic Press, Inc. (November 1999).
AS	22	Sutovsky, P., et al., "Ubiquitin-based sperm assay for the diagnosis of male factor infertility," <i>Hum. Reprod.</i> 16:250-258, Oxford University Press (February 2001).
AT	22	Swann, K., "A cytosolic sperm factor stimulates repetitive calcium increases and mimics fertilization in hamster eggs," <i>Development</i> 110:1295-1302, Company of Biologists Ltd. (1990).

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	APPLICANT Oko and Sutovsky	
	FILING DATE May 25, 2001	GROUP 1646

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	<u>23</u>	Talian, J.C., et al., "A rapid procedure for preparing fluorescein-labelled specific antibodies from whole antiserum: its use in analyzing cytoskeletal architecture," <i>J. Cell Biol.</i> 97:1277-1282, Rockefeller University Press (1983).
AS	<u>23</u>	Tanaka, H., et al., "Isolation and characterization of cDNA clones specifically expressed in testicular germ cells," <i>FEBS Lett.</i> 355:4-10, Elsevier Science B.V. (1994).
AT	<u>23</u>	Tang, T.S., et al., "Ca <sup>2+</sup> oscillations induced by a cytosolic sperm protein factor are mediated by a maternal machinery," <i>Development</i> 127:1141-1150, Company of Biologists Ltd. (March 2000).

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	AP						Yes No

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AR	24	Terada, Y., et al., "Microfilament stabilization by jasplakinolide arrests oocyte maturation, cortical granule exocytosis, sperm incorporation, cone resorption, and cell-cycle progression, but not DNA replication, during fertilization in mice," <i>Mol. Reprod. Dev.</i> 56:89-98, Wiley-Liss, Inc. (May 2000).
AS	24	Tovich, P.R., et al., "Isolation and perinuclear immunolocalization of somatic histones H2B and H3 in bull sperm heads," <i>J. Androl. (Suppl.)</i> : Abstract p. 19, (May/June 2001).
AT	24	Van Steirteghem, A.C., et al., "High fertilization and implantation rates after intracytoplasmic sperm injection," <i>Hum. Reprod.</i> 8:1061-1066, Oxford University Press (1993).

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	AR	25	Von Bulow, M., et al., "Molecular nature of calicin, a major basic protein of the mammalian sperm head cytoskeleton," <i>Exp. Cell Res.</i> 219:407-413, Academic Press, Inc. (1995).
	AS	25	Von Bulow, M., et al., "Cp $\beta$ 3, a novel isoform of an actin-binding protein, is a component of the cytoskeletal calyx of the mammalian sperm head," <i>Exp. Cell. Res.</i> 233:216-224, Academic Press, Inc. (1997).
	AT	25	Wilding, M., et al., "A soluble extract from human spermatozoa activates ascidian oocytes," <i>Dev. Growth Differ.</i> 39:9-36, Japanese Society of Developmental Biologists (1997).

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	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>26</u>	Witton, C.J., et al., "Injection of a boar sperm factor causes calcium oscillations in oocytes of the marsupial opossum <i>Monodelphis domestica</i> ," <i>Zygote</i> 7:271-277, Cambridge University Press (November 1999).
	AS	<u>26</u>	Wolf, E., et al., "Nuclear transfer in mammals: recent developments and future perspectives," <i>J. Biotechnol.</i> 65:99-110, Elsevier Science (1998).
	AT	<u>26</u>	Wolf, D.P., et al., "Nuclear transfer in the rhesus monkey: practical and basic implications," <i>Biol. Reprod.</i> 60:199-204, Society for the Study of Reproduction (February 1999).

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FORM PTO-1449

INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1669.0050001/EEF/RGMAPPLICATION NO.  
09/864,291APPLICANT  
Oko and SutovskyFILING DATE  
May 25, 2001GROUP  
1646**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA						
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	AC						
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	AH						
	AI						
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**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>27</u>	Wolny, Y.M., et al., "Human glucosamine-6-phosphate isomerase, a homologue of hamster oscillin, does not appear to be involved in Ca <sup>2+</sup> release in mammalian oocytes," <i>Mol. Reprod. Dev.</i> 52:277-287, Wiley-Liss, Inc. (March 1999).
	AS	<u>27</u>	Wolosker, H., et al., "Molecularly cloned mammalian glucosamine-6-phosphate deaminase localizes to the transporting epithelium and lacks oscillin activity," <i>FASEB J.</i> 12:91-99, Federation of American Societies for Experimental Biology (1998).
	AT	<u>27</u>	Wu, H., et al., "Partial characterization of the calcium-releasing activity of porcine sperm cytosolic extracts," <i>Dev. Biol.</i> 203:369-381, Plenum Press (1998).

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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1669.0050001APPLICATION NO.  
09/864,291APPLICANT  
Oko and SutovskyFILING DATE  
May 25, 2001GROUP  
1646

## U.S. PATENT DOCUMENTS

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	28	Yagi, R., et al., "A WW domain-containing yes-associated protein (YAP) is a novel transcriptional co-activator," <i>EMBO J.</i> 18:2551-2562, Oxford University Press (May 1999).
	AS	28	Yang, X., et al., "Nuclear transfer in cattle: effect of nuclear donor cells, cytoplasmic age, co-culture, and embryo transfer," <i>Mol. Reprod. Dev.</i> 35:29-36, Wiley-Liss, Inc. (1993).
	AT	28	Yazawa, H., et al., "Comparison of oocyte activation and Ca <sup>2+</sup> oscillation-inducing abilities of round/elongated spermatids of mouse, hamster, rat, rabbit and human assessed by mouse oocyte activation assay," <i>Hum. Reprod.</i> 15:2582-2590, Oxford University Press (December 2000).

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FORM PTO-1449

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
1669.0050001/EEF/RGMTECH CENTER #600/2900  
ATTORNEY NO.  
097864-2000APPLICANT  
Oko and SutovskyFILING DATE  
May 25, 2001GROUP  
1646

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	29	Yazawa, H., et al., "Oocyte activation and Ca <sup>2+</sup> oscillation-inducing abilities of mouse round/elongated spermatids and the developmental capacities of embryos from spermatid injection," <i>Hum. Reprod.</i> 16:1221-1228, Oxford University Press (February 2001).
	AS	29	
	AT	29	

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